Yosemite National Park Interactive Classroom

Teaching Suggestions: Geology Activity #1

Know Your Rocks and Minerals

Background Information:

Rock is made up of minerals. Most granitic rock in Yosemite is made up of four main minerals. Granitic rock makes up 95% of the rock in Yosemite National Park. Resource message: It's not O.K. to take rocks and other natural objects from a national park. The program theme for your on-site program could also be introduced at the end of this activity.

Vocabulary:

granitic rock, mineral

If You are Taking the Virtual Hike

This online activity consists of three questions about rocks and minerals. If students have already viewed the Field Journal section, this information should be a review. Students have two tries to answer correctly. The program presents immediate feedback to the answers and suggests a hint after a first incorrect answer.

If You are Visiting the Park and Hiking the Trail

Materials:

Small pieces of different types of granitic rocks; some rough-edged and some smooth and rounded (one per person).

Site:

Beginning of Mirror Lake trail (see the Mirror Lake Trail Map).

Time:

10-15 minutes

Activity:

Have the students sit in a circle. Hand one piece of granite to each student. Tell them to examine their rocks closely so that they can identify them later. Use the following questions and have a few individuals describe their rocks.

- Is it a rock or mineral?
- Why?
- How many different colors are there?
- What do the colors represent?
- What kind of rock is it?

Possible answers: the different colors are different minerals, rock is made up of different minerals, the rock is granite, and there are four minerals in most of the granite in Yosemite.

Place all the rocks in the center of the circle. Mix up the rocks and have each student find his or her rock. How did they identify their individual rock? Remind them they are in a National Park and have students return their rocks to the ground.